

FORM PTO-1390 (Modified)
(REV 11-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

112740-334

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

10/031644

INTERNATIONAL APPLICATION NO
PCT/EP00/03044

INTERNATIONAL FILING DATE
05 April 2000

PRIORITY DATE CLAIMED
03 May 1999

TITLE OF INVENTION

METHOD FOR CREATING TEXT

APPLICANT(S) FOR DO/EO/US

Bernd Holz Aug Der Heide et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☒ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☒ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 20 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☒ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. ☒ Certificate of Mailing by Express Mail
23. ☐ Other items or information:

U.S. APPLICATION NO. 10709164 (UNKNOWN, SEE 37 CFR 1.44)		INTERNATIONAL APPLICATION NO. PCT/EP00/03044		ATTORNEY'S DOCKET NUMBER 112740-334	
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24. The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) : <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1040.00 <input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$890.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$740.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$710.00 <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =				CALCULATIONS PTO USE ONLY 	
				\$890.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).				\$0.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	2 - 20 =	0	x \$18.00	\$0.00	
Independent claims	1 - 3 =	0	x \$84.00	\$0.00	
Multiple Dependent Claims (check if applicable).				<input type="checkbox"/> \$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$890.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27). The fees indicated above are reduced by 1/2.				\$0.00	
SUBTOTAL =				\$890.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).				\$0.00	
TOTAL NATIONAL FEE =				\$890.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).				<input type="checkbox"/> \$0.00	
TOTAL FEES ENCLOSED =				\$890.00	
				Amount to be: refunded	\$
				charged	\$

a. ☒ A check in the amount of **\$890.00** to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

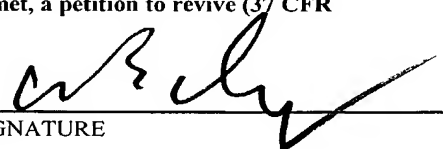
c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. **02-1818**. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card **WARNING: Information on this form may become public. Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

William E. Vaughan (Reg. No. 39,056)
 Bell, Boyd & Lloyd LLC
 P.O. Box 1135
 Chicago, Illinois 60690-1135
 (312) 807-4292


 SIGNATURE

William E. Vaughan
 NAME

39,056
 REGISTRATION NUMBER

November 2, 2001
 DATE

BOX PCT

IN THE UNITED STATES ELECTED/DESIGNATED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

5

PRELIMINARY AMENDMENT

APPLICANTS: Bernd Holz Aug Der Heide et al. DOCKET NO: 112740-334

SERIAL NO:

GROUP ART UNIT:

EXAMINER:

INTERNATIONAL APPLICATION NO:

PCT/EP00/03044

10

INTERNATIONAL FILING DATE:

05 April 2000

INVENTION: METHOD FOR CREATING TEXT

Assistant Commissioner for Patents,
Washington, D.C. 20231

15

Sir:

Please amend the above-identified International Application before entry
into the National stage before the U.S. Patent and Trademark Office under 35
U.S.C. §371 as follows:

20

In the Specification:

Please replace the Specification of the present application, including the
Abstract, with the following Substitute Specification:

SPECIFICATION

TITLE OF THE INVENTION

25

METHOD FOR CREATING TEXT

BACKGROUND OF THE INVENTION

30

To date, text is preferably input sequentially using a keyboard, with
fundamental information units (for example, letters, digits, or, generally,
alphanumeric characters) being retrieved whenever a key is pressed. Typical
examples are the keyboard for a computer or the 12-key keypad on a telephone. In
this context, there are normally more fundamental information units than keys,
which results in multiple use of a key for appropriate retrieval mechanisms. Thus,
for example, a shift key additionally needs to be pressed or one key needs to be

pressed a number of times within a time window. The problem in this instance is that the fewer keys there are available, the more complex and error-prone becomes the construction or input of superordinate information units, such as a word.

To avoid this problem, methods exist (for example, "TEGIC T9") which
5 evaluate the pressing of a multiple-use key on the basis of appropriate algorithms and probabilities. The evaluation involves determining which of the respectively associated fundamental information units the user probably wanted to retrieve in actual fact in order to construct a superordinate information unit by this action. The following problems exist in this regard:

10 By virtue of the principle, first of all, incorrect character sequences, or character sequences not intended by the user, are regularly produced which confuse the user and reduce acceptance of the method.

In addition, the methods make relatively high demands on the hardware provided (that is to say, on the processor power and on the memory requirement).
15 Also, existing solutions are designed primarily for the English language, whose grammar and other relevant parameters are of comparatively simple structure. There is still no proven practice for the German language.

The present invention, therefore, directed toward enabling text to be written conveniently when using keys which are limited in number.

20 SUMMARY OF THE INVENTION

The inventive method permits convenient and fast input of text by retrieval of superordinate information units, for example words.

In this context, no fundamental information units are input sequentially using a keyboard or the like, but instead superordinate information units are
25 selected directly from lists compiled statically and/or dynamically on the basis of context of use and probability of use. Information units not contained in the lists can be added using conventional methods. The advantage of this integrated concept is that much of the text typically used in connection with systems for information electronics, communication electronics and consumer electronics can
30 be produced conveniently, quickly and without errors. This increases the practical usability and the user and market acceptance of such systems.

Accordingly, in an embodiment of the present invention, a method is provided for creating text which includes the steps of selecting a first information unit from a first selection set, providing each first information unit with at least one associated second information unit from a second selection set, and selecting a second information unit, and producing the text upon succession of the selected second information unit.

In an embodiment, the method further includes the step of displaying the association between second information units from the second selection set and a first information unit from the first selection set graphically on a display device.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and the Figures.

BRIEF DESCRIPTION OF THE FIGURES

Figures 1 through 3 respectively show a list of sequentially presented information units in accordance with the teachings of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

An advantage of the inventive method FITT (abbreviation for “Fast Item To Text”) lies in the fast compilation of, by way of example, short text using direct access to ready-made individual building blocks, in clear structuring and in specific selection of categories and terms.

By way of example, the display unit used is a color display having seven rows of 16 characters each. In the associated Figure 1, the black and white presentation suggests that only shading or text on a black background in the form of inverse text can be shown.

Row one visualizes the currently compiled or edited character sequence, with a flashing block cursor (row 1, position 9) marking the position at which the next characters input are inserted. Rows two to six show selection options for terms in the right-hand half which each belong to a superordinate term category in the left-hand half. The association between category and term is indicated in the example by shading. The seventh row provides softkeys, on a context-dependent basis, which can be used for navigation or editing. The first softkey (upward

arrow) allows the “upward navigation” function, the second softkey (downward arrow) allows the “downward navigation” function, the third softkey (horizontal double-headed arrow) makes it possible to change between the right-hand and the left-hand area, or vice versa. The fourth softkey (OK) transfers an information unit
5 to row one of the written text.

Figure 1 represents the following state:

Text input invoked, “Reason” category selected (in the left-hand area) using the first and second softkeys, third softkey used to change to the right-hand area containing the terms for this category, “meeting” term selected, and fourth softkey
10 “OK” used to transfer it to the position of the block cursor. A space is automatically tagged on and the write cursor is moved forward. The currently selected term is shown in inverse form in the selection window (right-hand area, rows two to six).

Changing area using the third softkey and navigating upward using the first softkey replace the contents of the right-hand selection window, and the set of
15 terms shown in Figure 2 is obtained.

The selected category is now “Place”; operating the third softkey and confirming using the fourth softkey “OK” take the situation to Figure 3.

In Figure 3, within the context of one embodiment of the present invention,
20 a term has been selected which firstly shifts the previous inputs to the left out of the editor window in row 1, indicated by the dots in the first position. Secondly, it provides an opportunity for manual addition, discernible by the “*” in the term. The editor mode is automatically entered, in which single characters can be input.

“OK” is used to exit the editor mode. A number of operations are now
25 available:

store the term which has been input instead of the “*”, e.g., in the “Place” category;

return to the previous FITT “term insertion mode”; and

text input then can be terminated and the message can immediately
30 start to be transmitted directly by pressing the start (send) keys.

in one embodiment of the present invention, other functions are possible:

- importing names from an available electronic telephone book;
- individualizing the categories and terms in the right-hand or left-hand area of the display windows in the figures by adding/deleting and changing;
- and

5 simple termination of text input and further processing of the
message directly from the “term insertion mode”.

Different sets of categories can be provided for the various purposes of use. A set of terms for the area “Business” could have the following appearance, for example:

- 10 a) “Time” category:
when; now; later; earlier; today; tomorrow; on **.**.**. at **;**. **;
**. minutes; **. hours; start; end; before; after;
- b) “Request” category:
please; inform; call; report; come; bring *;
- 15 c) “Additional info” category:
exactly; approximately; at least; at most; urgently; with; and; or; but;
good; bad; regarding; according to;
- d) “Place” category:
where; at; in front of; on the left; on the right; in *; in the *; in
- 20 room *; in the office; * company; at home;
- e) “Trip” category:
how; car; taxi; rail; air; coming; going;
- f) “Persons” category:
who; customer *; I; you; she, he; boss; secretary; and
- 25 g) “Reason” category:
what; callback; conference; meeting; dining; celebration; arrival;
departure, appointment, arrangement.

Below is an illustrative text for a short message (SMS) with the set of terms for “Business”

30 (italics show conventional, unspecified text input):

Desired message	SMS implementation with FITT
<i>Where exactly is the conference</i>	Conference where exactly
<i>I will come 10 minutes later</i>	Arrival 10 minutes later
<i>Conference on 9.24. at 10 o'clock in the Hofbräuhaus</i>	Conference on 09.24.98 at 10.00 in the Hofbräuhaus
<i>Meeting with Matthias today in room 424</i>	Meeting with Matthias today in room 424
<i>I am leaving now, please inform Frau Meier</i>	Departure now, please inform Fr. Meier

5 Instead of the two selection sets described which relate to one another hierarchically, it also would be possible to provide three or even more selection sets for creating the texts. In this context, it would be useful to have a display option of appropriate size on the display.

Although the present invention has been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended Claims.

10 ABSTRACT OF THE DISCLOSURE

A method for creating text in which an information unit can be selected from a respective first selection set, with each information unit from the first selection set having at least one associated information unit from a respective second selection set, and in which an information unit can be selected from the
15 respective second selection set, with the succession of selected information units producing the text.

CLAIMS

On page 7, cancel line 1, and substitute the following left-hand justified heading therefore:

20 CLAIMS

Please cancel claims 1 and 2, without prejudice, and substitute the following claims therefore:

3. A method for creating text, the method comprising the steps of:
25 selecting a first information unit from a first selection set;

providing each first information unit with at least one associated
second information unit from a second selection set; and
selecting a second information unit, and creating the text upon
succession of the select second information unit.

5

4. A method for creating text as claimed in Claim 3, the method further
comprising the step of:

displaying graphically on a display device the association between
the second information units from the second selection set and the first information
10 unit from the first selection set.

REMARKS

The present amendment makes editorial changes and corrects typographical
errors in the specification, which includes the Abstract, in order to conform the
specification to the requirements of United States Patent Practice. No new matter is
15 added thereby. Attached hereto is a marked-up version of the changes made to the
specification by the present amendment. The attached page is captioned "**Version
With Markings To Show Changes Made**".

In addition, the present amendment cancels original claims 1 and 2 in favor
of new claims 3 and 4. Claims 3 and 4 have been presented solely because the
20 revisions by crossing out underlining which would have been necessary in claims 1
and 2 in order to present those claims in accordance with preferred United States
Patent Practice would have been too extensive, and thus would have been too
burdensome. The present amendment is intended for clarification purposes only
and not for substantial reasons related to patentability pursuant to 35 U.S.C. §§103,
25 102, 103 or 112. Indeed, the cancellation of claims 1 and 2 does not constitute an
intent on the part of the Applicants to surrender any of the subject matter of claims
1 and 2.

Early consideration on the merits is respectfully requested.

Respectfully submitted,

 (Reg. No. 39,056)

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Attorneys for Applicants

10

VERSIONS WITH MARKINGS TO SHOW CHANGES MADE

In The Specification:

The Specification of the present application, including the Abstract, has been amended as follows:

5

SPECIFICATION

TITLE OF THE INVENTION

METHOD FOR CREATING TEXT

BACKGROUND OF THE INVENTION

Description

10 ~~Text input by selection of information units~~

~~The invention a method for creating texts.~~

To date, texts are is preferably input sequentially using a keyboard, with fundamental information units (for example, letters, digits, or, generally, alphanumeric characters) being retrieved whenever a key is pressed. Typical
15 examples are the keyboard for a computer or the 12-key keypad on a telephone. In this context, there are normally more fundamental information units than keys, which results in multiple use of a key for appropriate retrieval mechanisms. Thus, for example, a shift key additionally needs to be pressed or one key needs to be pressed a plurality number of times within a time window. The problem in this
20 instance is that the fewer keys there are available, the more complex and error-prone becomes the construction or input of superordinate information units, such as a word.

To avoid this problem, methods exist (for example, "TEGIC T9") which evaluate the pressing of a multiple-use key on the basis of appropriate algorithms
25 and probabilities. The evaluation involves determining which of the respectively associated fundamental information units the user probably wanted to retrieve in actual fact in order to construct a superordinate information unit by this action. The following problems exist in this regard:

By virtue of the principle, first of all, incorrect character sequences, or
30 character sequences not intended by the user, are regularly produced which confuse the user and reduce acceptance of the method.

In an embodiment, the method further includes the step of displaying the association between second information units from the second selection set and a first information unit from the first selection set graphically on a display device.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and the Figures.

BRIEF DESCRIPTION OF THE FIGURES

Figures 1 through 3 respectively show a list of sequentially presented information units in accordance with the teachings of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The An advantage of the inventive method FITT (abbreviation for “Fast Item To Text”) lies in the fast compilation of, by way of example, short texts using direct access to ready-made individual building blocks, in clear structuring and in specific selection of categories and terms.

By way of example, the display unit used is a color display having seven rows of 16 characters each. In the associated Figure 1, the black and white presentation means suggests that only shading or text on a black background in the form of inverse text can be shown.

Row one visualizes the currently compiled or edited character sequence, with a flashing block cursor (row 1, position 9) marking the position at which the next characters input are inserted. Rows two to six show selection options for terms in the right-hand half which each belong to a superordinate term category in the left-hand half. The association between category and term is indicated in the example by shading. The seventh row provides softkeys, on a context-dependent basis, which can be used for navigation or editing. The first softkey (upward arrow) allows the “upward navigation” function, the second softkey (downward arrow) allows the “downward navigation” function, the third softkey (horizontal double-headed arrow) makes it possible to change between the right-hand and the left-hand area, or vice versa. The fourth softkey (OK) transfers an information unit to row one of the written text.

Figure 1 represents the following state:

Text input invoked, "Reason" category selected (in the left-hand area) using the first and second softkeys, third softkey used to change to the right-hand area containing the terms for this category, "meeting" term selected, and fourth softkey "OK" used to transfer it to the position of the block cursor. A space is

5 automatically tagged on and the write cursor is moved forward. The currently selected term is shown in inverse form in the selection window (right-hand area, rows two to six).

Changing area using the third softkey and navigating upward using the first softkey replace the contents of the right-hand selection window, and the set of

10 terms shown in ~~f~~Figure 2 is obtained.

The selected category is now "Place"; operating the third softkey and confirming using the fourth softkey "OK" take the situation to ~~f~~Figure 3.

In ~~f~~Figure 3, within the context of one ~~development~~ embodiment of the present invention, a term has been selected which firstly shifts the previous inputs

15 to the left out of the editor window in row 1, indicated by the dots in the first position. Secondly, it provides an opportunity for manual addition, discernible by the "*" in the term. The editor mode is automatically entered, in which single characters can be input.

"OK" is used to exit the editor mode. A number of operations are now

20 available:

Sstore the term which has been input instead of the "*", e.g., in the "Place" category;

Return to the previous FITT "term insertion mode"; and

Text input can then can be terminated and the message can

25 immediately start to be transmitted directly by pressing the start (send) keys.

In one ~~refinement~~ embodiment of the present invention, other functions are possible:

Importing names from an available electronic telephone book;

Individualizing the categories and terms in the right-hand or left-

30 hand area of the display windows in the figures by adding/deleting and changing; and

Simple termination of text input and further processing of the message directly from the “term insertion mode”.

Different sets of categories can be provided for the various purposes of use. A set of terms for the area “Business” could have the following appearance, for

5 example:

a) “Time” category:

when; now; later; earlier; today; tomorrow; on **.**.**. at **.**. **. minutes; **. hours; start; end; before; after;

b) “Request” category:

10 please; inform; call; report; come; bring *;

c) “Additional info” category:

exactly; approximately; at least; at most; urgently; with; and; or; but; good; bad; regarding; according to;

d) “Place” category:

15 where; at; in front of; on the left; on the right; in *; in the *; in room *; in the office; * company; at home;

e) “Trip” category:

how; car; taxi; rail; air; coming; going;

f) “Persons” category:

20 who; customer *; I; you; she, he; boss; secretary; and

g) “Reason” category:

what; callback; conference; meeting; dining; celebration; arrival; departure, appointment, arrangement.

ABSTRACT OF THE DISCLOSURE

Abstract

~~Text input by selection of information units~~

~~The invention relates to a~~ A method for creating texts in which an information unit
5 can be selected from a respective first selection set, with each information unit from
the first selection set having at least one associated information unit from a
respective second selection set, and in which an information unit can be selected
from the respective second selection set, with the succession of selected
information units producing the text.

10

~~Figure 1~~

Sheet 1/1

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
1	Meeting															
2											callback					
3											meeting					
4											dining					
5											celebration					
6											arrival					
7	↑		↓				←→				OK					

FIG 1

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
	Meeting															
											where					
	Place										in room *					
											in the office					
											*company					
											at home					
	↑		↓				←→				OK					

FIG 2

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
	...ing in room															
											where					
											in room					
											office					
											* company					
											at home					
	↑		↓				←→				OK					

FIG 3

V/PRTS

10/031644
531 Rec'd PGT/P.L. 02 NOV 2001

Description

Text input by selection of information units

- 5 The invention a method for creating texts.

To date, texts are preferably input sequentially using a keyboard, with fundamental information units (for example letters, digits, or, generally, alphanumeric characters) being retrieved whenever a key is pressed. Typical examples are the keyboard for a computer or the 12-key keypad on a telephone. In this context, there are normally more fundamental information units than keys, which results in multiple use of a key for appropriate retrieval mechanisms. Thus, for example, a shift key additionally needs to be pressed or one key needs to be pressed a plurality of times within a time window. The problem in this instance is that the fewer keys there are available, the more complex and error-prone becomes the construction or input of superordinate information units, such as a word.

To avoid this problem, methods exist (for example "TEGIC T9") which evaluate the pressing of a multiple-use key on the basis of appropriate algorithms and probabilities. The evaluation involves determining which of the respectively associated fundamental information units the user probably wanted to retrieve in actual fact in order to construct a superordinate information unit by this action. The following problems exist in this regard:

By virtue of the principle, first of all, incorrect character sequences, or character sequences not intended by the user, are regularly produced which confuse the user and reduce acceptance of the method.

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- 3 -

each show a list of sequentially presented information units.

5 The advantage of the inventive method FITT (abbreviation for "Fast Item To Text") lies in the fast compilation of, by way of example, short texts using direct access to ready-made individual building blocks, in clear structuring and in specific selection of categories and terms.

10

By way of example, the display unit used is a color display having seven rows of 16 characters each. In the associated figure 1, the black and white presentation means that only shading or text on a black background 15 in the form of inverse text can be shown.

Row one visualizes the currently compiled or edited character sequence, with a flashing block cursor (row 1, position 9) marking the position at which the next 20 characters input are inserted. Rows two to six show selection options for terms in the right-hand half which each belong to a superordinate term category in the left-hand half. The association between category and term is indicated in the example by shading. The 25 seventh row provides softkeys, on a context-dependent basis, which can be used for navigation or editing. The first softkey (upward arrow) allows the "upward navigation" function, the second softkey (downward arrow) allows the "downward navigation" function, the 30 third softkey (horizontal double-headed arrow) makes it possible to change between the right-hand and the left-hand area, or vice versa. The fourth softkey (OK) transfers an information unit to row one of the written text.

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Figure 1 represents the following state:

Text input invoked, "Reason" category selected (in the left-hand area) using the first and second softkeys, third

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Text input can then be terminated and the message can immediately start to be transmitted directly by pressing the start (send) keys.

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- 5 -

In one refinement of the invention, other functions are possible:

Importing names from an available electronic telephone
5 book.

Individualizing the categories and terms in the right-hand or left-hand area of the display windows in the figures by adding/deleting and changing.
10

Simple termination of text input and further processing of the message directly from the "term insertion mode".

Different sets of categories can be provided for the various purposes of use. A set of terms for the area "Business" could have the following appearance, for example:
15

a) "Time" category:

20 when; now; later; earlier; today; tomorrow;
on **.**.**. at **.**. **. minutes; **. hours; start;
end; before; after.

b) "Request" category:

25 please; inform; call; report; come; bring *.

c) "Additional info" category:

exactly; approximately; at least; at most; urgently;
with; and; or; but; good; bad; regarding; according to.
30

d) "Place" category:

where; at; in front of; on the left; on the right;
in *; in the *; in room *; in the office; * company; at home.
35

e) "Trip" category:

how; car; taxi; rail; air; coming; going.

- 15 Instead of the two selection sets described which
relate to one another hierarchically, it would also be
possible to provide three or even more selection sets
for creating the texts. In this context, it would be
useful to have a display option of appropriate size on
20 the display.

Patent claims

1. A method for creating texts
in which an information unit can be selected from
5 a respective first selection set, with each
information unit from the first selection set
having at least one associated information unit
from a respective second selection set, and
in which an information unit can be selected from
10 the respective second selection set, with the
succession of selected information units producing
the text.
2. The method as claimed in claim 1,
15 in which the selection sets are displayed in
columns or in rows on a display device.
3. The method as claimed in claim 1 or 2,
20 in which the association between information units
from the second selection set and an information
unit from the first selection set is displayed
graphically on the display device.

Figure 1

Blatt 1/1

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
1	Treffen															
2	Zeit								Rückruf							
3	Ort								Treffen							
4	Anlaß								Essen							
5	Person								Feier							
6	Reise								Ankunft							
7	↑				↓				↔				OK			

FIG 1

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
Treffen															
Zeit wo															
Ort im Raum*															
Anlaß im Büro															
Person Firma *															
Reise zuhause															
↑				↓				←				OK			

FIG 2

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
...en im Raum≡≡															
Zeit								wo							
Ort								im Raum*							
Anlaß								Büro							
Person								Firma *							
Reise								zuhause							
↑				↓				←				OK			

FIG 3

Declaration and Power of Attorney For Patent Application

Erklärung Für Patentanmeldungen Mit Vollmacht

German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

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Texteingabe durch Selektion von Informationseinheiten

deren Beschreibung

(zutreffendes ankreuzen)

☐ hier beigelegt ist.

☒ am 05.04.2000 als

PCT internationale Anmeldung

PCT Anmeldungsnummer PCT/EP00/03044

eingereicht wurde und am _____

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

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As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Text input by selecting information elements

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on 05.04.2000 as

PCT international application

PCT Application No PCT/EP00/03044

and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

German Language Declaration

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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)



29177

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Ext. _____

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Three First National Plaza, 70 West Madison Street, Suite 3300 60602-4207 Chicago, Illinois
Telephone: (001) 312 372 11 21 and Facsimile (001) 312 372 20 98

or

Customer No.

Voller Name des einzigen oder ursprünglichen Erfinders: BERND HOLZ AUF DER HEIDE	Full name of sole or first inventor: BERND HOLZ AUF DER HEIDE
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Unterschrift des Erfinders <i>Anton Obermaier</i> Datum 25.09.01	Second Inventor's signature Date
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(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).